PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 2-6301-00008/02003
Effective Date: 08/03/2015 Expiration Date: 08/02/2025

Permit Issued To:NYC DEPT OF ENVIRONMENTAL PROTECTION
96-05 HORACE HARDING EXPY FL 5
CORONA, NY 11368

Contact: JOHN G PETITO, JR
NYC DEP
96-05 HORACE HARDING EXPY FL 2
CORONA, NY 11368
(718) 595-4906

Facility: BOWERY BAY WASTWATER TREATMENT PLANT
43-10 BERRIAN BLVD
ASTORIA, NY 11105

Contact: DIANE HAMMERMAN
NYC DEP BWT
96-05 HORACE HARDING EXPY FL 2
CORONA, NY 11368
(718) 595-4965

Description:
The NYCDEP Bowery Bay WPCP is a municipal wastewater treatment facility located at the 43-01 Berrian BLVD, Astoria, New York.

The NYCDEP Bowery Bay WPCP is capable of providing secondary treatment to 225 mgd of primarily residential wastewater in Northwestern Queens. The major unit operations of the facility consist of screening, primary treatment, activated-sludge treatment, secondary clarification, sludge treatment, and disinfection of the plant effluent before discharge to the Rikers Island Channel. Solids handling at the plant include cyclone degritting of the primary sludge, gravity thickening of the primary and secondary high-rate anaerobic digestion, and sludge storage and dewatering. The Bowery Bay WPCP operates combustion installations, three methane-abatement systems, three wet scrubbers for the Dewatering building odor-control system, and two dual-system units with two wet scrubbers and carbon adsorption for the centrate odor-control system.

This modification/renewal application updates the WWTP's operation and equipment and includes these changes to the current permit: 1) updates operation of Emission Unit 1-BOILR; 2) updates description of Emission Unit 2-GENER; 3) updates status of Emission Unit 5-WGTRE; 4) requests removal of NOx stack test requirement for flares.

1. Updates operation of Emission Unit 1-BOILR.

The existing Air State Facility Permit states that the four new main building Cleaver-Brooks CB 200-750 boilers use natural gas as primary fuel and No. 2 fuel oil as backup. The ongoing upgrading construction recently introduced digester gas into the boiler room and these four new boilers now have the option to burn digester gas as well. Burning digester gas in the boilers eliminates the need to flare all of the digester gas at the waste gas burners, and significantly reduces air pollutant emissions from the WWTP.

2. Updates description of Emission Unit 2-GENER.
The existing Air State Facility Permit lists two Caterpillar Model 3516A l.75MW emergency engine generators in Emission Unit 2-GENER. DEP notified the New York State Department of Environmental Conservation (DEC) on 2/13/2007 that two additional rental 2000KW emergency engine generators would be installed and DEC approved this installation as an exempt activity on 4/4/2007. In a letter dated February 28, 2011, DEP notified DEC that DEP will replace these two rental 2000KW emergency engine generators with two DEP-owned Caterpillar 3516C 2000KW engine generators.

3. Updates status of Emission Unit 5-WGTRE.
The original WWTP upgrade construction plan included replacing two old open flares with two enclosed flares. Due to change in the final upgrade plan, the WWTP currently has two Varec open flame flares, one 10” and one 6”. The 10” flare is primarily used for burning excessive digester gas, and the second 6" flare serves as a standby.

4. Requests Removal of NOx Stack Test Requirement for the new flares.
The upgrade construction has introduced digester gas to the boilers room and enabled burning digester gas at the boilers. As a result, the need to flare all of the digester gas will be eliminated; flaring of the digester gas will only be necessary if there is excessive digester gas.

In addition, this application package also incorporates the DEP previous modification application submitted to DEC on July 3, 2013 for the following changes:
-Removing the proposed new residual handling building construction in Emission Unit 3-WWTRE
-Correcting descriptions of Emission Units 4-SLUDG.

The facility NOx emissions are capped at 24.9 tons per year.
The facility VOC emissions are capped at 24.9 tons per year.
The facility HAP emissions are capped at 24.9 tons per year (9.9 tpy for any individual HAP).
The facility GHGs (CO2e) emissions are capped at 99,000 tons per year.

Records demonstrating compliance with these caps will be kept in accordance with the permit special conditions.

The facility is subject to the provisions of State Facility specified under 6NYCRR Part 201-7.

The Air State Facility permit contains a listing of the applicable federal, state, and compliance monitoring requirements for the facility.

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator: STEPHEN A WATTS
47-40 21ST ST
LONG ISLAND CITY, NY 11101-5401

Authorized Signature: _____ Date: ___ / ___ / _____

Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the compliance permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in any compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

LIST OF CONDITIONS

DEC GENERAL CONDITIONS
****** General Provisions ******
GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1: Facility Inspection by the Department
Applicable State Requirement: ECL 19-0305

Item 1.1:
The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

Item 1.2:
The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

Item 1.3:
A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Condition 2: Relationship of this Permit to Other Department Orders and Determinations
Applicable State Requirement: ECL 3-0301 (2) (m)

Item 2.1:
Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Condition 3: Applications for permit renewals, modifications and transfers
Applicable State Requirement: 6 NYCRR 621.11

Item 3.1:
The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item 3.2:
The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

Item 3.3:
Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

Condition 4: Permit modifications, suspensions or revocations by the Department
Applicable State Requirement: 6 NYCRR 621.13

Item 4.1:
The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

a) materially false or inaccurate statements in the permit application or supporting papers;
b) failure by the permittee to comply with any terms or conditions of the permit;
c) exceeding the scope of the project as described in the permit application;
d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

****** Facility Level ******

Condition 5: Submission of application for permit modification or renewal - REGION 2 HEADQUARTERS
Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 5.1:
Submission of applications for permit modification or renewal are to be submitted to:
NYSDEC Regional Permit Administrator
Region 2 Headquarters
Division of Environmental Permits
1 Hunters Point Plaza, 4740 21st Street
Long Island City, NY 11101-5407
(718) 482-4997

Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To:NYC DEPT OF ENVIRONMENTAL PROTECTION
96-05 HORACE HARDING EXPY FL 5
CORONA, NY 11368

Facility: BOWERY BAY WASTWATER TREATMENT PLANT
43-10 BERRIAN BLVD
ASTORIA, NY 11105

Authorized Activity By Standard Industrial Classification Code:
4952 - SEWERAGE SYSTEMS

Permit Effective Date: 08/03/2015 Permit Expiration Date: 08/02/2025

LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS
Facility Level

1 6 NYCRR Subpart 201-7: Facility Permissible Emissions
*2 6 NYCRR Subpart 201-7: Capping Monitoring Condition
*3 6 NYCRR Subpart 201-7: Capping Monitoring Condition
*4 6 NYCRR Subpart 201-7: Capping Monitoring Condition
*5 6 NYCRR Subpart 201-7: Capping Monitoring Condition
6 6 NYCRR 211.1: Air pollution prohibited
7 6 NYCRR 225-1.2: Compliance Demonstration
8 6 NYCRR 225-1.2 (f): Compliance Demonstration
9 6 NYCRR 225-1.2 (g): Compliance Demonstration
10 6 NYCRR 225-1.2 (h): Compliance Demonstration
11 6 NYCRR 225-1.6 (f): Compliance Demonstration
12 6 NYCRR 227-1.3 (a): Compliance Demonstration
13 40CFR 60.8(d), NSPS Subpart A: Prior notice.
14 40CFR 60, NSPS Subpart IIII: Compliance and Enforcement
15 40CFR 63, Subpart JJJJJJ: Compliance and Enforcement
16 40CFR 63, Subpart ZZZZ: Compliance and Enforcement

Emission Unit Level

EU=1-BOILR

17 40CFR 60.42c(i), NSPS Subpart Dc: Enforceability
18 40CFR 60.43c(c), NSPS Subpart Dc: Compliance Demonstration
19 40CFR 60.48c(f)(1), NSPS Subpart Dc: Compliance Demonstration

EU=3-WWTRE

20 6 NYCRR 212.4 (a): Emissions from new emission sources and/or modifications
21 6 NYCRR 212.6 (a): Compliance Demonstration

EU=4-SLDGE

22 6 NYCRR 212.4 (a): Emissions from new emission sources and/or modifications
23 6 NYCRR 212.6 (a): Compliance Demonstration

STATE ONLY ENFORCEABLE CONDITIONS
Facility Level

24 ECL 19-0301: Contaminant List
25 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
26 6 NYCRR Subpart 201-5: Emission Unit Definition
27 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
28 6 NYCRR 201-5.3 (c): Compliance Demonstration
29 6 NYCRR 211.2: Visible Emissions Limited

Emission Unit Level

30 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
31 6 NYCRR Subpart 201-5: Process Definition By Emission Unit

NOTE: * preceding the condition number indicates capping.

FEDERALLY ENFORCEABLE CONDITIONS
****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: **Sealing - 6 NYCRR 200.5**

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation. Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

No person shall operate any air contamination source sealed by the Commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

Item B: **Acceptable Ambient Air Quality - 6 NYCRR 200.6**

Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

Item C: **Maintenance of Equipment - 6 NYCRR 200.7**

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications,

required to operate such device effectively.

Item D: **Unpermitted Emission Sources - 6 NYCRR 201-1.2**

If an existing emission source was subject to the permitting requirements of 6 NYCRR Part 201 at the time of construction or modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

(a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.

(b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

Item E: **Emergency Defense - 6 NYCRR 201-1.5**

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;

(2) The equipment at the permitted facility causing the emergency was at the time being properly operated;

(3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

Item F: **Recycling and Salvage - 6 NYCRR 201-1.7**

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Item G: **Prohibition of Reintroduction of Collected Contaminants to the Air - 6 NYCRR 201-1.8**

No person shall unnecessarily remove, handle, or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

Item H: **Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR 201-3.2 (a)**

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item I: **Proof of Eligibility for Sources Defined as Trivial Activities - 6 NYCRR 201-3.3 (a)**

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item J: **Required Emission Tests - 6 NYCRR 202-1.1**

An acceptable report of measured emissions shall be submitted, as may be required by the Commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the Commissioner within the time stated shall be sufficient reason for the Commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6 NYCRR Subpart 202-1.

Item K: **Open Fires Prohibitions - 6 NYCRR 215.2**
Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

Item L: **Permit Exclusion - ECL 19-0305**
The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item M: **Federally Enforceable Requirements - 40 CFR 70.6 (b)**
All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

FEDERAL APPLICABLE REQUIREMENTS
The following conditions are federally enforceable.

Condition 1: **Facility Permissible Emissions**

Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 1.1:
The sum of emissions from the emission units specified in this permit shall not equal or exceed the following
Potential To Emit (PTE) rate for each regulated contaminant:

CAS No: 0NY100-00-0 Name: TOTAL HAP	PTE:	49,800	pounds per year
CAS No: 0NY210-00-0 Name: OXIDES OF NITROGEN	PTE:	49,800	pounds per year
CAS No: 0NY750-00-0 Name: CARBON DIOXIDE EQUIVALENTS	PTE:	198,000,000	pounds per year
CAS No: 0NY998-00-0 Name: VOC	PTE:	49,800	pounds per year

Condition 2: Capping Monitoring Condition
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 2.1:
Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 201-6
6 NYCRR Subpart 231-2

Item 2.2:
Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 2.3:
The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Item 2.4:
On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time

period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 2.5:
The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 2.6:
The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 2.7:
Compliance Demonstration shall include the following monitoring:

Capping: Yes
Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Plant-wide NOx emission limit shall be less than 24.9 tons per year.

The owner or operator shall calculate NOx emissions (based on the fuel quantities) using the following formula:

D(0.02) + G(100) + E(0.44) + E1(0.2) + F(40.8) < 49,800 lbs/yr of Oxides of Nitrogen emissions.

Where: D = 12-month rolling total of distillate oil fired (from boilers) in gals/yr;
G = 12-month rolling total of gaseous fuels: natural gas or digester gas, or the blend of natural gas and digester gas fired (from boilers) in MMSCF/yr;
E = 12-month rolling total of diesel fuel fired (from engines) in gals/yr;
E1 = 12-month rolling total of diesel fuel fired (from two new 2,000 kW emergency generator engines 2010 year model) in gals/yr
-emission factor 0.2 lb/gal for firing diesel fuel is based on the emission standard provided in 40CFR 89.112;
F = 12-month rolling total of digester gas fired (waste gas treatment system - flares) in MMSCF/yr
-emission factor 40.8 lb/mmscft

for the digester gas fired from the waste gas treatment system is based on AP-42 Table 13.5-1 NOx emission factor of 0.068 lb/mmBtu and heating value of digester gas 600 Btu/scft.

Process Material: FUEL
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 24.9 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2016.
Subsequent reports are due every 12 calendar month(s).

Condition 3: Capping Monitoring Condition
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 3.1:
Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 201-6

Item 3.2:
Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 3.3:
The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Item 3.4:
On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 3.5:
The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 3.6:
The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

Item 3.7:
Compliance Demonstration shall include the following monitoring:

Capping: Yes
Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Annual HAP emissions from wastewater treatment process will be estimated using the toxchem+model. The target compound list of HAP will be sampled at the influent at a minimum of once per year.

Parameter Monitored: TOTAL HAP
Upper Permit Limit: 24.9 tons per year
Reference Test Method: USEPA 600 Series
Monitoring Frequency: MINIMUM - ONCE PER CALENDAR YEAR
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2016.
Subsequent reports are due every 12 calendar month(s).

Condition 4: Capping Monitoring Condition
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 4.1:
Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 201-6

Item 4.2:
Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 4.3:
The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Item 4.4:
On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 4.5:
The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 4.6:
The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 4.7:
Compliance Demonstration shall include the following monitoring:

Capping: Yes
Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Annual VOC emissions from wastewater treatment process will be estimated using the toxchem+model. The target compound list of VOC will be sampled at the influent at a minimum of once per year.

Parameter Monitored: VOC
Upper Permit Limit: 24.9 tons per year
Reference Test Method: USEPA 600 Series
Monitoring Frequency: MINIMUM - ONCE PER CALENDAR YEAR
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2016.
Subsequent reports are due every 12 calendar month(s).

Condition 5: Capping Monitoring Condition
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 5.1:
Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 201-6

Item 5.2:
Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 5.3:
The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Item 5.4:
On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 5.5:
The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 5.6:
The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

Item 5.7:
Compliance Demonstration shall include the following monitoring:

Capping: Yes
Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Plant-wide GHG emissions are capped below 99,000 tons CO2e per year.

The owner or operator shall calculate GHG emissions (based on the fuel usage) using the following formula:

Plant-wide GHG emissions = (plant-wide CO2 emission + plant-wide CH4 emission * (25) +
+ plant-wide N2O emission * (298)) / 1000 < 99,000 tons per year.

Where:
Plant-wide CO2 emission = D(10.21) + NG(0.05444) + DGF(0.025254) + DGV(37%)(0.0283)(1842) / 1000
Plant-wide CH4 emission = (D(0.41) + NG(0.00103) + DGF(0.001552) + DGV(63%)(0.0283)(668)) / 1000
Plant-wide N2O emission = (D(0.08) + NG(0.00010) + DGF(0.000306)) / 1000

Where:
D - 12-month rolling total of distillate oil fired in gal/yr,
10.21 - CO2 emission factor proposed by EPA in Kg/gal,
0.41 - CH4 emission factor proposed by EPA in g/gal,
0.08 - N2O emission factor proposed by EPA in g/gal.

NG - total natural gas fired in scf/yr,
0.05444 - CO2 emission factor proposed by EPA in Kg/scf,
0.00103 - CH4 emission factor proposed by EPA in g/scf,
0.00010 - N2O emission factor proposed by EPA in g/scf.

DGF - total digester gas fired in scf/yr,
0.025254 - CO2 emission factor proposed by EPA in Kg/scf,
0.001552 - CH4 emission factor proposed by EPA in g/scf,
0.000306 - N2O emission factor proposed by EPA in g/scf.

DGV - total vented digester gas fired in scf/yr,
37% - estimated percentage of CO2 in raw digester gas,
63% - estimated percentage of CH4 in raw digester gas
1 ft3 = 0.0283 m3
Density of CH4 = 668 g/m3
Density of CO2 = 1842 g/m3

Where:
25 - Global Warming Potential of CH4,
298 - Global Warming Potential of N2O.

Upon request, a stack test shall be required to demonstrate compliance with this capping condition.

Parameter Monitored: CARBON DIOXIDE EQUIVALENTS
Upper Permit Limit: 99000 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.
The initial report is due 1/30/2016.
Subsequent reports are due every 12 calendar month(s).

Condition 6: Air pollution prohibited
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR 211.1

Item 6.1:
No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

Condition 7: Compliance Demonstration
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR 225-1.2

Item 7.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 7.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS
Monitoring Description:
Purchase of fuel oil by all New York City agencies is managed by the New York City Department of Citywide Administrative Services ("DCAS"). All NYC service contracts require suppliers to provide ultralow sulfur fuel oils that meet the regulatory requirements of 0.0015 percent sulfur or less by weight. The DCAS performs monitoring of the sulfur content in the fuel oil on a random basis at supply terminals instead of conducting monitoring at each batch delivery.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.0015 percent by weight
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 8: **Compliance Demonstration**
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR 225-1.2 (f)

Item 8.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 8.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS
Monitoring Description:

Owners and/or operators of commercial, industrial, or residential emission sources that fire number two heating oil on or after July 1, 2012 are limited to the purchase of number two heating oil with 0.0015 percent sulfur by weight or less. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 2 HEATING OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.0015 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 9: **Compliance Demonstration**
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR 225-1.2 (g)

Item 9.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 9.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS
Monitoring Description:

Owners and/or operators of a stationary combustion installation that fires distillate oil other than number two heating oil are limited to the purchase of distillate oil with 0.0015 percent sulfur by weight or less on or after July 1, 2014. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.0015 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 10: Compliance Demonstration
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR 225-1.2 (h)

Item 10.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 10.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS
Monitoring Description:

Owners and/or operators of a stationary combustion installations that fire distillate oil are limited to the firing of distillate oil with 0.0015 percent sulfur by weight or less on or after July 1, 2016. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a

Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.0015 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 11: Compliance Demonstration
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR 225-1.6 (f)

Item 11.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 11.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Facility owners subject to this Subpart must submit a written report of the fuel sulfur content exceeding the applicable sulfur-in-fuel limitation, measured emissions exceeding the applicable sulfur-in-fuel limitation, measured emissions exceeding the applicable equivalent emission rate, and the nature and cause of such exceedances if known, for each calendar quarter, within 30 days after the end of any quarterly period in which an exceedances takes place.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD - SEE MONITORING

DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 12: Compliance Demonstration
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR 227-1.3 (a)

Item 12.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 12.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
No owner or operator of a combustion installation shall emit greater than 20 percent opacity except for one six minute period per hour, not to exceed 27 percent, based upon the six minute average in reference test method 9 in Appendix A of 40 CFR 60.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Monitoring Frequency: DAILY
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 13: Prior notice.
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:40CFR 60.8(d), NSPS Subpart A

Item 13.1:
The owner or operator shall provide the Administrator with prior notice of any performance test at least 30 days in advance of testing.

Condition 14: Compliance and Enforcement
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:40CFR 60, NSPS Subpart IIII

Item 14.1:
The Department has not accepted delegation of 40 CFR Part 60 Subpart IIII. Any questions concerning compliance and/or enforcement of this regulation should be referred to USEPA Region 2, 290 Broadway, 21st Floor, New York, NY 10007-1866; (212) 637-4080. Should the Department decide to accept delegation of 40 CFR Part 60 Subpart IIII during the term of this permit, enforcement of this regulation will revert to the Department as of the effective date of delegation.

Condition 15: Compliance and Enforcement
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:40CFR 63, Subpart JJJJJJ

Item 15.1:
The Department has not accepted delegation of 40 CFR Part 63 Subpart JJJJJJ. Any questions concerning compliance and/or enforcement of this regulation should be referred to USEPA Region 2, 290 Broadway, 21st Floor, New York, NY 10007-1866; (212) 637-4080. Should the Department decide to accept delegation of 40 CFR Part 63 Subpart JJJJJJ during the term of this permit, enforcement of this regulation will revert to the Department as of the effective date of delegation.

Condition 16: Compliance and Enforcement
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:40CFR 63, Subpart ZZZZ

Item 16.1:
The Department has not accepted delegation of 40 CFR Part 63 Subpart ZZZZ. Any questions concerning compliance and/or enforcement of this regulation should be referred to USEPA Region 2, 290 Broadway, 21st Floor, New York, NY 10007-1866; (212) 637-4080. Should the Department decide to accept delegation of 40 CFR Part 63 Subpart ZZZZ during the term of this permit, enforcement of this regulation will revert to the Department as of the effective date of delegation.

****** Emission Unit Level ******

Condition 17: Enforceability
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:40CFR 60.42c(i), NSPS Subpart Dc

Item 17.1:
This Condition applies to Emission Unit: 1-BOILR

Item 17.2:
The sulfur dioxide emission limits, percentage reductions, and fuel oil sulfur limitations shall apply at all times, including periods of startup, shutdown, and malfunction.

Condition 18: Compliance Demonstration
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:40CFR 60.43c(c), NSPS Subpart Dc

Item 18.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-BOILR

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 18.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
On and after the date on which the initial performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood or oil and has a heat input capacity of 30 million BTU per hour or greater shall cause to be discharged into the atmosphere from an affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more thatn 27 percent opacity.

Parameter Monitored: OPACITY
Upper Permit Limit: 20.0 percent
Reference Test Method: Method 9
Monitoring Frequency: DAILY
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 19: Compliance Demonstration
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:40CFR 60.48c(f)(1), NSPS Subpart Dc

Item 19.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-BOILR

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 19.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Fuel supplier certification shall include the following information for distillate oil:

i) The name of the oil supplier, and

ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c. 60-Dc 41c defines distillate oil as fuel that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, A standard Specification for Fuel Oils.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 20: Emissions from new emission sources and/or modifications
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR 212.4 (a)

Item 20.1:
This Condition applies to Emission Unit: 3-WWTRE

Item 20.2:
No person shall cause or allow emissions that exceed the applicable permissible emission rate as determined from Table 2, Table 3, or Table 4 of 6 NYCRR Part 212 for the environmental rating issued by the commissioner.

Condition 21: Compliance Demonstration
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR 212.6 (a)

Item 21.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 3-WWTRE

Item 21.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
No person shall cause or allow emissions having an average opacity during any six consecutive minutes of 20

percent or greater from any process emission source, except only the emission of uncombined water. Compliance with this requirement shall be determined by the facility owner/operator conducting a daily survey of visible emissions when the process is in operation. If any visible emissions are identified, corrective action is required. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: EPA Method 9
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 22: Emissions from new emission sources and/or modifications
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR 212.4 (a)

Item 22.1:
This Condition applies to Emission Unit: 4-SLDGE

Item 22.2:
No person shall cause or allow emissions that exceed the applicable permissible emission rate as determined from Table 2, Table 3, or Table 4 of 6 NYCRR Part 212 for the environmental rating issued by the commissioner.

Condition 23: Compliance Demonstration
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable Federal Requirement:6 NYCRR 212.6 (a)

Item 23.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 4-SLDGE

Item 23.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
No person shall cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source, except only the emission of uncombined water. Compliance with this requirement shall be determined by the facility

owner/operator conducting a daily survey of visible emissions when the process is in operation. If any visible emissions are identified, corrective action is required. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: EPA Method 9
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

STATE ONLY ENFORCEABLE CONDITIONS
****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: **Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)**
Where facility owners and/or operators keep records pursuant to compliance with the requirements of 6 NYCRR Subpart 201-5.4, and/or the emission capping requirements of 6 NYCRR Subpart 201-7, the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. Facility owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department.

Item B: **General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5**
Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

STATE ONLY APPLICABLE REQUIREMENTS
The following conditions are state only enforceable.

Condition 24: **Contaminant List**
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable State Requirement:ECL 19-0301

Item 24.1:
Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 007446-09-5
Name: SULFUR DIOXIDE

CAS No: 0NY075-00-0
Name: PARTICULATES

CAS No: 0NY100-00-0
Name: TOTAL HAP

CAS No: 0NY210-00-0
Name: OXIDES OF NITROGEN

CAS No: 0NY750-00-0
Name: CARBON DIOXIDE EQUIVALENTS

CAS No: 0NY998-00-0
Name: VOC

Condition 25: Malfunctions and start-up/shutdown activities
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable State Requirement:6 NYCRR 201-1.4

Item 25.1:
(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

(b) The facility owner or operator shall compile and maintain records of all equipment malfunctions, maintenance, or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when requested to do so, or when so required by a condition of a permit issued for the corresponding air contamination source. Such reports shall state whether any violations occurred and, if so, whether they were unavoidable, include the time, frequency and duration of the maintenance and/or start-up/shutdown activities, and an estimate of the emission rates of any air contaminants released. Such records shall be maintained for a period of at least five years and made available for review to department representatives upon request. Facility owners or operators subject to continuous stack monitoring and quarterly reporting requirements need not submit additional reports for equipment maintenance or start-up/shutdown activities for the facility to the department.

(c) In the event that emissions of air contaminants in excess of any emission standard in this Subchapter occur due to a malfunction, the facility owner or operator shall compile and maintain records of the malfunction and notify the department as soon as possible during normal working

hours, but not later than two working days after becoming aware that the malfunction occurred. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates.

(d) The department may also require the owner or operator to include, in reports described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.

(e) A violation of any applicable emission standard resulting from start-up, shutdown, or malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.

Condition 26: Emission Unit Definition
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 26.1:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 1-BOILR
Emission Unit Description:

This emission unit consists of the WWTP's new main building boilers and the existing dewatering building boilers. The purpose of these boilers is to provide process heat, space heating, and hot water lo the entire facility.
The four new Cleaver Brooks CB200-750 boilers (1NMB1, 1NMB2, 1NMB3, 1NMB4), each rated 31.4 mmBtu per hour, use digester gas or natural gas as the primary fuel with #2 diesel as backup. Emissions from these boilers is exhausted to the atmosphere through two stacks (1NMS1, 1NMS2), which each stack serving two boilers. A total of two processes are defined for operation of the main building boilers: process MBG for operation of gaseous fuel, natural gas or digester gas, or the blend of natural gas and digester gas; and process MBO for backup operation with #2 diesel.

The dewatering building's two existing Cleaver Brooks CB200-200 boilers (1DBB1, 1DBB2), each rated 8.4 mmBtu per hour, use natural gas as primary fuel with #2 diesel as backup. Emissions from these two boilers is exhausted to atmosphere through one stack (1DWS1). A total of two processes are defined for operation of the dewatering facility boilers: process DBG for operation on gaseous fuel (natural gas), and process DBO for operation on #2 diesel.

The WWTP installed a 350 HP contingent interim boiler during construction of the four (4) new main building 750 HP boilers. This interim boiler was already removed from operation after the four (4) new main building 750 HP boilers were available for operation. DEP will use this 350 HP boiler as a contingent interim boiler in case any of the Bowery Bay WWTP boilers is not available for operation in the future, or it will be mobilized to other DEP facilities as a contingent interim boiler, in cases of boiler(s) or heat distribution system malfunction.

Building(s): DEWATER
MAIN

Item 26.2:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 2-GENER
Emission Unit Description:
This emission unit consists of the existing generator system. The purpose of the system is to provide back-up electrical power to the entire facility in the event of an electrical supply interruption or failure. The generator system will remain in place and continue to operate as described above. A single process is defined: operation of the existing generators on #2 ultra-low sulfur diesel (EGO) for the generation of electricity. Emission sources for the electricity generation process include:
-Two Caterpillar Model 3516A engine generators (2ENG1, 2ENG2). Each engine is rated at 1.75MW. Engine emissions are exhausted to the atmosphere through dedicated stacks (2EGS1, 2EGS2).
-Two Caterpillar Model 3516C engine generators (2ENG3, 2ENG4). Each engine is rated at 2MW. Engine emissions are exhausted to the atmosphere through dedicated stacks (2EGS3, 2EGS4).

Building(s): DEWATER
MAIN

Item 26.3:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 3-WWTRE
Emission Unit Description:
This emission unit consists of the existing wastewater treatment system. Process steps include: receipt, screening, and distribution (RSD); primary settling (PRI); aeration (AER); final settling (FIN); and disinfection (DIS). An additional process which supports disinfection involves the storage and handling of sodium hypochlorite solution (HYP).
Emission sources (or controls) for the wastewater receipt, screening, and distribution process include the high and

low-level pump station chambers and bar screens (3HPSC, 3LPSC), high-and-low level pump station ventilation systems (3HPSV, 3LPSV), and south and north WWTP raw sewage influent channels (3SICS, 3SICN). Collectively, these emission sources and controls are referred to as the WWTP headworks. The high and low-level pump stations and ventilation systems are located in the main building, and the influent channels are uncovered and open to the atmosphere. Emissions from the high and low-level pump station ventilation system are exhausted to the atmosphere through dedicated vents (3HLV1, 3LLV1).

Emission sources for the wastewater primary settling process include nine south plant and six north plant preliminary settling tanks (3PSTS, 3PSTN). Each tank is uncovered and open to the atmosphere. Scum from the preliminary settling tanks, which is currently collected in four scum-collection pits and hauled off-site for disposal.

Emission sources for the wastewater aeration process include six south plant and four north plant aeration tanks (3ATS, 3ATN). Each tank has four passes, and is uncovered and open to the atmosphere. Aeration tank biological activity will be increased due to improvements to be made to the return sludge distribution system.

Emission sources for the wastewater final settling process include eleven south plant and six north plant final settling tanks (3FSTS, 3FSTN). Each tank is uncovered and open to the atmosphere. Scum from the final settling tanks, which is currently collected in four scum-collection pits and hauled off-site for disposal.

Emission sources for the wastewater disinfection process include three chlorine contact tanks (3CCT). Each tank is uncovered and open to the atmosphere. A scum-removal system will be added to the chlorine contact tanks.

Emission sources for the sodium hypochlorite storage include four, 10,000 gallon plastic storage tanks (3SHST) located in the chlorine building. Emissions from these four tanks are passively released to the atmosphere through dedicated vents (3CBV1 through 3CBV4) extending through the chlorine building roof. No changes will be made to this emission source.

Building(s): CB
MAIN

OUTDOOR
RHB

Item 26.4:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 4-SLDGE
Emission Unit Description:

This emission unit consists of the existing sludge treatment system. Process steps include: return sludge pumping (RSP), sludge degritting (DEG), sludge thickening (THI), sludge digestion (DIG), and sludge dewatering (DEW).
Emission sources for the return sludge pumping process include three south plant and two north plant return sludge wells (4RSWS, 4RSWN). Each well is uncovered and open to the atmosphere. Improvements to the return sludge pumping process will be made to optimize the return of activated sludge to the aeration tanks.

Emission sources (or controls) for the sludge degritting process include grit collection and washing operations (4GCW) and grit building ventilation (4GBV). All emissions are passively vented to the atmosphere through doors and windows.

Emission sources for the sludge thickening process include eight sludge thickening tanks. Two sets of four tanks each (4STT1, 4STT2) were constructed at different times. Each tank is uncovered and open to the atmosphere. Improvements to the sludge thickening process will be made to prevent thickener upsets and reduce malodorous emissions. Thickener pumps and grinders will be replaced, and the balance between sludge influent and withdrawal rates will be automated.

Emission sources for the sludge digestion process include four covered sludge digester tanks (4SDT). It is noted that four other tanks are used for temporary storage of sludge prior to dewatering, #2 and #3 sludge storage tanks are completely enclosed and are not sources of emissions, #1 and #4 sludge storage tanks are not covered. Improvements to the sludge digestion process include the conversion of two existing sludge storage tanks to digester tanks.

Emission sources (or controls) for the sludge dewatering process include the sludge dewatering itself (4SD) and five sludge dewatering building odor-control systems. Three of these odor-control systems are wet-scrubber types (4DBW1 through 4DBW3), one of which is reserved for back-up purposes. The remaining two odor-control systems are two-stage types - wet scrubbers followed by

activated-carbon (4DBC1, 4DBC2) - one of which is again reserved for back-up purposes. The wet scrubbers will use chemical to achieve design H2S removal efficient at high H2S concentration but could achieve adequate H2S removal efficiency by using less or no chemical at normal low H2S inlet concentration. Upon control, emissions from sludge dewatering are exhausted to the atmosphere through dedicated stacks (4DBS1 through 4DBS3 for the scrubber stacks; 4DBS4 and 4DBS5 for the carbon stacks). No changes will be made to this emission source.

Building(s): DEWATER
GB
RHB

Item 26.5:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 5-WGTRE
Emission Unit Description:
This emission unit consists of two Varec open flame flares that burn excessive digester gas, one 10" and one 6" (emission sources NFLR1 and NFLR2). This process includes digester gas burning (DGB). Exhaust from these two open flame flares goes through emission points NFLRA and NFLRB respectively. The 10" flare is primarily used for flaring excessive gas with the second 6" burner as standby.

Building(s): OUTDOOR

Condition 27: Renewal deadlines for state facility permits
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable State Requirement:6 NYCRR 201-5.2 (c)

Item 27.1:
The owner or operator of a facility having an issued state facility permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

Condition 28: Compliance Demonstration
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable State Requirement:6 NYCRR 201-5.3 (c)

Item 28.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 28.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Any reports or submissions required by this permit shall be submitted to the Regional Air Pollution Control Engineer (RAPCE) at the following address:

Division of Air Resources
NYS Dept. of Environmental Conservation
Region 2
47-40 21st St.
Long Island City, NY 11101

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 29: Visible Emissions Limited
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable State Requirement:6 NYCRR 211.2

Item 29.1:
Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

****** Emission Unit Level ******

Condition 30: Emission Point Definition By Emission Unit
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 30.1:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 1-BOILR

Emission Point: 1DWS1
Height (ft.): 65 Diameter (in.): 15
NYTMN (km.): 4514.45 NYTME (km.): 593.446 Building: DEWATER

Emission Point: 1MBS1
Height (ft.): 71 Diameter (in.): 48
NYTMN (km.): 4514.571 NYTME (km.): 593.289 Building: MAIN

Emission Point: 1NMS1

Height (ft.): 71 Diameter (in.): 36
NYTMN (km.): 4514.537 NYTME (km.): 593.319 Building: MAIN

Emission Point: 1NMS2
Height (ft.): 71 Diameter (in.): 36
NYTMN (km.): 4514.535 NYTME (km.): 593.321 Building: MAIN

Item 30.2:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 2-GENER

Emission Point: 2EGS1
Height (ft.): 18 Diameter (in.): 24
NYTMN (km.): 4514.421 NYTME (km.): 593.38 Building: MAIN

Emission Point: 2EGS2
Height (ft.): 18 Diameter (in.): 24
NYTMN (km.): 4514.423 NYTME (km.): 593.378 Building: MAIN

Emission Point: 2EGS3
Height (ft.): 18 Diameter (in.): 24
NYTMN (km.): 4514.423 NYTME (km.): 593.378 Building: DEWATER

Emission Point: 2EGS4
Height (ft.): 18 Diameter (in.): 24
NYTMN (km.): 4514.423 NYTME (km.): 593.378 Building: DEWATER

Item 30.3:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 3-WWTRE

Emission Point: 3CBV1
Height (ft.): 22 Diameter (in.): 4
NYTMN (km.): 4514.714 NYTME (km.): 593.385 Building: CB

Emission Point: 3CBV2
Height (ft.): 22 Diameter (in.): 4
NYTMN (km.): 4514.711 NYTME (km.): 593.385 Building: CB

Emission Point: 3CBV3
Height (ft.): 22 Diameter (in.): 4
NYTMN (km.): 4514.706 NYTME (km.): 593.385 Building: CB

Emission Point: 3CBV4
Height (ft.): 22 Diameter (in.): 4
NYTMN (km.): 4514.711 NYTME (km.): 593.382 Building: CB

Emission Point: 3HLV1
Height (ft.): 31 Length (in.): 48 Width (in.): 20
NYTMN (km.): 4514.542 NYTME (km.): 593.333 Building: MAIN

Emission Point: 3LLV1
Height (ft.): 2 Length (in.): 50 Width (in.): 28
NYTMN (km.): 4514.578 NYTME (km.): 593.264 Building: MAIN

Item 30.4:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 4-SLDGE

Emission Point: 4DBS1
Height (ft.): 65 Diameter (in.): 37
NYTMN (km.): 4514.425 NYTME (km.): 593.421 Building: DEWATER

Emission Point: 4DBS2
Height (ft.): 65 Diameter (in.): 37
NYTMN (km.): 4514.436 NYTME (km.): 593.431 Building: DEWATER

Emission Point: 4DBS3
Height (ft.): 65 Diameter (in.): 37
NYTMN (km.): 4514.445 NYTME (km.): 593.437 Building: DEWATER

Emission Point: 4DBS4
Height (ft.): 57 Diameter (in.): 10
NYTMN (km.): 4514.419 NYTME (km.): 593.417 Building: DEWATER

Emission Point: 4DBS5
Height (ft.): 57 Diameter (in.): 10
NYTMN (km.): 4514.421 NYTME (km.): 593.418 Building: DEWATER

Item 30.5:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 5-WGTRE

Emission Point: NFLRA
Height (ft.): 15 Diameter (in.): 30
NYTMN (km.): 4514.47 NYTME (km.): 593.45 Building: OUTDOOR

Emission Point: NFLRB
Height (ft.): 15 Diameter (in.): 30
NYTMN (km.): 4514.47 NYTME (km.): 593.45 Building: OUTDOOR

Condition 31: Process Definition By Emission Unit
Effective between the dates of 08/03/2015 and 08/02/2025

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 31.1:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-BOILR

Process: DBG Source Classification Code: 1-03-006-03
Process Description:
NATURAL GAS FIRED IN TWO EXISTING CLEAVER
BROOKS CB200-200 BOILERS (1DBB1, 1DBB2)
EACH RATED 8.4 MMBTU/HR.

Emission Source/Control: 1DBB1 - Combustion
Design Capacity: 8.4 million Btu per hour

Emission Source/Control: 1DBB2 - Combustion
Design Capacity: 8.4 million Btu per hour

Item 31.2:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-BOILR
Process: DBO Source Classification Code: 1-03-005-01
Process Description:
#2 FUEL OIL FIRED IN TWO EXISTING CLEAVER
BROOKS CB200-200 BOILERS (1DBB1, 1DBB2)
EACH RATED 8.4 MMBTU/HR.

Emission Source/Control: 1DBB1 - Combustion
Design Capacity: 8.4 million Btu per hour

Emission Source/Control: 1DBB2 - Combustion
Design Capacity: 8.4 million Btu per hour

Item 31.3:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-BOILR
Process: MBG Source Classification Code: 1-03-007-01
Process Description:
This process consists of operation of the four new
Cleaver Brooks CB200-750 boilers (1NMB1, 1NMB2, 1NMB3,
1NMB4), each rated 31.4 mmBtu/hr, when the main building
boilers operate on gaseous fuels: natural gas or digester
gas, or the blend of natural gas and digester gas.

Emission Source/Control: 1NMB1 - Combustion
Design Capacity: 31.4 million Btu per hour

Emission Source/Control: 1NMB2 - Combustion
Design Capacity: 31.4 million Btu per hour

Emission Source/Control: 1NMB3 - Combustion
Design Capacity: 31.4 million Btu per hour

Emission Source/Control: 1NMB4 - Combustion
Design Capacity: 31.4 million Btu per hour

Item 31.4:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-BOILR
Process: MBO Source Classification Code: 1-03-005-01
Process Description:

This process consists of operation of the four new Cleaver Brooks CB200-750 boilers (1NMB1, 1NMB2, 1NMB3, 1NMB4), each rated 31.4 mmBtu/hr, when the main building boilers operate on #2 fuel oil.

The WWTP installed a 350 hp contingent interim boiler during construction of the four (4) new main building 750 hp boilers. This interim boiler was already removed from operation after the four (4) new Main Building 750 hp boilers were available for operation. DEP will use this 350 hp boiler as a contingent interim boiler in case any of the Bowery Bay WWTP boilers are not available for operation in the future, or it will be mobilized to another DEP facility as a contingent interim boiler, in cases of boiler(s) or heat distribution system malfunction.

Emission Source/Control: 1NMB1 - Combustion
Design Capacity: 31.4 million Btu per hour

Emission Source/Control: 1NMB2 - Combustion
Design Capacity: 31.4 million Btu per hour

Emission Source/Control: 1NMB3 - Combustion
Design Capacity: 31.4 million Btu per hour

Emission Source/Control: 1NMB4 - Combustion
Design Capacity: 31.4 million Btu per hour

Item 31.5:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-GENER
Process: EGO Source Classification Code: 2-01-001-02
Process Description: Firing ultra-low sulfur diesel fuel in generators.

Emission Source/Control: 2ENG1 - Combustion
Design Capacity: 1,750 kilowatts

Emission Source/Control: 2ENG2 - Combustion
Design Capacity: 1,750 kilowatts

Emission Source/Control: 2ENG3 - Combustion
Design Capacity: 2,000 kilowatts

Emission Source/Control: 2ENG4 - Combustion

Design Capacity: 2,000 kilowatts

Item 31.6:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 3-WWTRE
Process: AER Source Classification Code: 5-01-007-31
Process Description:
THIS PROCESS CONSISTS OF WASTEWATER AERATION AND MARKS THE BEGINNING OF SECONDARY TREATMENT. WASTEWATER FROM THE PRELIMINARY SETTLING TANKS ENTERS THE AERATION TANKS WHERE AIR IS ADDED TO PROMOTE GROWTH OF BIOLOGICAL CULTURES WHICH, IN TURN, CONSUME DISS OLVED ORGANIC MATTER. ABOUT HALF OF THE EFFLUENT IS INTRODUCED INTO THE FIRST TANK PASS, WHILE THE REMAINDER IS ADDED DURING SUBSEQUENT PASSES FOR PROCESS MAXIMIZATION. REPOPULATION OF BIOLOGICAL CULTURES IS FACILITATED BY THE INTRODUCTION OF A PORTION OF THE RETURN ACTIVATED SLUDGE FROM THE FINAL SETTLING TANKS.

Emission Source/Control: 03ATN - Process
Design Capacity: 90,000,000 gallons per day

Emission Source/Control: 03ATS - Process
Design Capacity: 135,000,000 gallons per day

Item 31.7:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 3-WWTRE
Process: DIS Source Classification Code: 5-01-007-60
Process Description:
THIS PROCESS CONSISTS OF WASTEWATER DISINFECTION (ALSO REFERRED TO AS CHLORINATION). WASTEWATER FROM THE FINAL SETTLING TANKS (SECONDARY TREATMENT) OR THE PRELIMINARY SETTLING TANKS (PRIMARY TREATMENT DURING EXCESSIVE WET-FLOW CONDITIONS) ENTERS THE CHLORINE CONTACT TANKS, WHERE SODIUM HYPOCHLORITE IS ADDED TO CONTROL BACTERIA. THE STATED TOTAL THRUPUT RATES (BOTH HOURLY AND ANNUAL) REFLECT THE PLANTS DESIGN CAPACITY FOR PRIMARY WASTEWATER TREATMENT (300 MGD).

Emission Source/Control: 03CCT - Process
Design Capacity: 300,000,000 gallons per day

Item 31.8:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 3-WWTRE
Process: FIN Source Classification Code: 5-01-007-40
Process Description:
THIS PROCESS CONSISTS OF WASTEWATER FINAL SETTLING WHICH IS PART OF SECONDARY TREATMENT. WASTEWATER FROM THE AERATION TANKS ENTERS THE FINAL SETTLING TANKS WHERE ORGANIC FLOC PRODUCED IN THE AERATION PROCESS IS ALLOWED TO SETTLE TO THE BOTTOM, AND SCUM A ND OTHER LIGHTER SOLIDS ARE SKIMMED FROM THE TOP. MOST OF THE ACTIVATED SLUDE, WHICH IS CREATED DURING CONCENTRATION OF THE COLLECTED ORGANIC FLOC, IS PUMPED TO THE SLUDGE THICKENERS, WHILE A PORTION IS RETURNED TO THE AERATION TANKS TO MAINTAIN A SUFFIC IENT MICROORGANISM POPULATION. THE STATED TOTAL THRUPUT RATES (BOTH HOURLY AND ANNUAL) REFLECT THE PLANT'S DESIGN CAPACITY FOR SECONDARY WASTEWATER TREATMENT (225 MGD).

Emission Source/Control: 3FSTN - Process
Design Capacity: 90,000,000 gallons per day

Emission Source/Control: 3FSTS - Process
Design Capacity: 135,000,000 gallons per day

Item 31.9:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 3-WWTRE
Process: HYP Source Classification Code: 5-01-007-60
Process Description:
THIS SUPPORT PROCESS CONSISTS OF THE STORAGE AND HANDLING OF SODIUM HYPOCHLORITE SOLUTION. A 15 PERCENT SODIUM HYPOCHLORIDE SOLUTION IS DELIVERED FROM THE STORAGE TANKS TO THE CHLORINE CONTACT TANKS USING AN AUTOMATED FEED-RATE CONTROL SYSTEM. THE FEED RATE IS AUTOMATICALLY ADJUSTED BASED ON A PRE-SET LEVEL OF CHLORINE RESIDUE MONITORED IN THE CONTACT TANK EFFLUENT. THIS IS ACCOMPLISHED USING REAL-TIME FEEDBACK TELEMETRY FROM THE CONTINUOUS CHLORINE ANALYZERS. THE STATED TOTAL THRUPUT RATES (BOTH HOURLY AND ANNUAL) REFLECT THE PLANT'S DESIGN CAPACITY FOR PRIMARY WASTEWATER TREATMENT (300 MGD).

Emission Source/Control: 3SHST - Process
Design Capacity: 40,000 gallons

Item 31.10:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 3-WWTRE
Process: PRI Source Classification Code: 5-01-007-20
Process Description:
THIS PROCESS CONSISTS OF WASTEWATER PRIMARY SETTLING. WASTEWATER FROM THE INFLUENT CHANNELS IS DELIVERED TO THE PRELIMINARY SETTLING TANKS WHERE HEAVY SOLDIS ARE ALLOWED TO SETTLE TO THE BOTTOM AND SCUM AND OTHER FLOATABLE MATERIALS ARE SKIMMED FROM THE TOP. THE SLUDGE COLLECTED FROM THE TANK BOTTOMS IS PUMPED TO THE SLUDGE DEGRITTERS (WHERE ADDITIONAL SOLIDS ARE REMOVED) BEFORE BEING PUMPED TO THE SLUDGE THICKENERS (SLUDGE DEGRITTING AND THICKENING IS ADDRESSED WITHIN EMISSION UNIT 4). THE STATED TOT AL THRUPUT RATES (BOTH HOURLY AND ANNUAL) REFLECT THE PLANT'S DESIGN CAPACITY FOR PRIMARY WASTEWATER TREATMENT (300 MGD).

Emission Source/Control: 3PSTN - Process
Design Capacity: 120,000,000 gallons per day

Emission Source/Control: 3PSTS - Process
Design Capacity: 180,000,000 gallons per day

Item 31.11:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 3-WWTRE
Process: RSD Source Classification Code: 5-01-007-07
Process Description:
THIS PROCESS CONSISTS OF WASTEWATER RECEIPT SCREENING, AND DISTRIBUTION. WASTEWATER ENTERS THE PLANT THROUGH TWO INTERCEPTORS (HIGH-AND LOW-LEVEL), AND THEN PASSES THROUGH A SERIES OF BAR SCREENS WHERE LARGE FLOATABLE OBJECTS ARE REMOVED. EACH WASTEWATE R STREAM ENTERS A CORRESPONDING WET WELL FROM WHICH IT IS PUMPED TO THE DIVISION STRUCTURE, WHERE MORE SCREENING TAKES PLACE AND THE TWO STREAMS ARE COMBINED. THE WASTEWATER THEN FLOWS FROM THE DIVISION STRUCTURE INTO A SERIES OF SOUTH AND NORTH PLANT IN FLUENT CHANNELS WHERE IT IS DISTRIBUTED TO EACH

PRELIMINARY SETTLING TANK. THE STATED TOTAL THRUPUT RATES (BOTH HOURLY AND ANNUAL) REFLECT THE PLANT'S DESIGN CAPACITY FOR PRIMARY WASTEWATER TREATMENT (300 MGD).

Emission Source/Control: 3HPSC - Process
Design Capacity: 160,000,000 gallons per day

Emission Source/Control: 3HPSV - Process
Design Capacity: 3,000 cubic feet per minute

Emission Source/Control: 3LPSC - Process
Design Capacity: 140,000,000 gallons per day

Emission Source/Control: 3LPSV - Process
Design Capacity: 3,600 cubic feet per minute

Item 31.12:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 4-SLDGE
Process: DEG Source Classification Code: 5-01-007-99
Process Description:
THIS PROCESS CONSISTS OF SLUDGE DEGRITTING. SLUDGE PUMPED TO THE GRIT BUILDING FROM THE PRELIMINARY SETTLING TANKS ENTERS CYCLONE SEPARATORS WHERE THE GRIT IS ISOLATED. THE GRIT IS THEN WASHED AND TRANSPORTED OFF-SITE FOR DISPOSAL. THE STATED THRUPUT R ATES (BOTH HOURLY AND ANNUAL) REFLECT THE PLANT'S DESIGN CAPACITY FOR SLUDGE DEGRITTING (347 CUBIC FEET PER DAY).

Emission Source/Control: 04GBV - Process
Design Capacity: 2,100 cubic feet per minute

Emission Source/Control: 04GCW - Process
Design Capacity: 347 cubic feet per day

Item 31.13:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 4-SLDGE
Process: DEW Source Classification Code: 5-01-007-92
Process Description:
THIS PROCESS CONSISTS OF SLUDGE DEWATERING. SLUDGE FROM THE SLUDGE DIGESTERS AND SLUDGE STORAGE TANKS IS PUMPED TO THE DEWATERING BUILDING WHERE THE LIQUID CENTRATE IS SEPARATED FROM THE

DIGESTED SLUDGE BY MEANS OF CENTRIFUGES. THE DEWATERED SLUDGE IS T RANSPORTED OFF-SITE FOR BENEFICIAL REUSE APPLICATION (PELLETIZED FERTILIZER PRODUCTION), AND THE LIQUID CENTRATE IS RETURNED TO THE AERATION TANKS. THE STATED TOTAL THRUPUT RATES (BOTH HOURLY AND ANNUAL) REFLECT THE PLANT'S DESIGN CAPACITY FOR SLUDGE DEW ATERING (0.5 MGD).

Emission Source/Control: 4DBC1 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: 4DBC2 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: 4DBW1 - Control
Control Type: WET SCRUBBER

Emission Source/Control: 4DBW2 - Control
Control Type: WET SCRUBBER

Emission Source/Control: 4DBW3 - Control
Control Type: WET SCRUBBER

Emission Source/Control: 004SD - Process
Design Capacity: 112,500 pounds per day

Item 31.14:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 4-SLDGE
Process: DIG Source Classification Code: 5-01-007-81
Process Description:
THIS PROCESS CONSISTS OF SLUDGE DIGESTION. THICKENED SLUDGE FROM THE SLUDGE THICKENEERS IS PUMPED TO THE DIGESTERS WHERE ANAEROBIC DIGESTION OCCURS. DIGESTER GAS IS GENERATED DURING THIS PROCESS. THE STATED TOTAL THUPUT RATES (BOTH HOURLY AND ANNUAL) R EFLECT THE PLANT'S DESIGN CAPACITY FOR SLUDGE DIGESTION (0.5 MGD).

Emission Source/Control: 04SDT - Process
Design Capacity: 4,000,000 gallons per day

Item 31.15:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 4-SLDGE
Process: RSP Source Classification Code: 5-01-007-19
Process Description:

THIS PROCESS CONSISTS OF RETURN SLUDGE PUMPING. ACTIVATED SLUDGE FROM THE FINAL SETTLING TANKS IS RETURNED, VIA PUMPING FROM A SUBSURFACE WET-WELL COLLECTION SYSTEM, TO BOTH THE SLUDGE THICKENERS AND AERATION TANKS. THE STATED TOTAL THRUPUT RATES (BOTH HOURLY AND ANNUAL) REFLECT THE PLANT'S DESIGN CAPACITY FOR RETURN SLUDGE PUMPING (150 MGD).

Emission Source/Control: 4RSWN - Process
Design Capacity: 60,000,000 gallons per day

Emission Source/Control: 4RSWS - Process
Design Capacity: 90,000,000 gallons per day

Item 31.16:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 4-SLDGE
Process: THI Source Classification Code: 5-01-007-71
Process Description:
THIS PROCESS CONSISTS OF SLUDGE THICKENING. DEGRITTED SLUDGE FROM THE PRELIMINARY SETTLING TANKS AND ACTIVATED SLUDGE FROM THE FINAL SETTLING TANKS ARE PUMPED TO CYLINDRICAL, GRAVITY-TYPE SLUDGE THICKENERS WHERE SLUDGE THICKENING OCCURS. REMOVED AND OVE RFLOW WASTEWATER IS RETURNED TO THE DIVISION STRUCTURE. THE STATED TOTAL THUPUT RATES (BOTH HOURLY AND ANNUAL) REFLECT THE PLANT'S DESIGN CAPACITY FOR SLUDGE THICKENING (0.5 MGD).

Emission Source/Control: 4STT1 - Process
Design Capacity: 1,000,000 gallons per day

Emission Source/Control: 4STT2 - Process
Design Capacity: 2,000,000 gallons per day

Item 31.17:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 5-WGTRE
Process: DGB Source Classification Code: 5-01-007-89
Process Description:
This process consists of burning excessive digester gas in two Varec open flame flares, one 10” and one 6". The 10" flare is primarily used for burning excessive digester gas with the second 6" flare as standby.

Emission Source/Control: NFLR1 - Combustion

Design Capacity: 90 million Btu per hour

Emission Source/Control: NFLR2 - Combustion
Design Capacity: 90 million BTUs per hour